

VASCULAR ACCESS FOR HEMODIALYSIS EDUCATION AND RESEARCH

To: CDC CRBSI guideline revision workgroup
From: Lesley C. Dinwiddie
Date: 12/3/2009
Re: Comments on The Draft Guidelines for the Prevention of Intravascular Catheter-Related Infections

As a nephrology nurse who specializes in vascular access and who had the privilege of serving on the KDOQI vascular access guidelines, I am delighted to see that the CRBSI guidelines are being updated. However it is obvious that these guidelines were not well advertised as there were no responses from the nephrology community as of this morning. I have sent out a blast email with the appropriate URLs but would request that, if you are interested in the input of those caring for hemodialysis catheters, you extend the comment period.

In addition, I am very disappointed that nephrology and nephrology nursing in particular were not invited to participate in this process especially when some of these guidelines include hemodialysis catheters. We have some 90,000 patients that started chronic hemodialysis in 2008 with catheters and 105,000 have catheters longer than 90 days putting them at twice the mortality risk of patients with fistulas, I believe that these guidelines are not representative of a large patient population who truly need them – the ESRD patients! I would request that you convene some nephrology experts on catheters for vascular access for hemodialysis to write guidelines specific to long-term catheters that are used approximately three times per week for dialysis.

The previous CRBSI guidelines of 2002 contained a section for hemodialysis catheters that was very helpful and will be missed. In particular was the statement that hemodialysis catheters should be used only for hemodialysis and not for any other purpose. I realize that there are no RCTs to support this and it would be impossible to do such a study, but common sense says that this was a necessary statement by the highest authority in healthcare in the US and should be maintained to protect patients with catheters from unnecessary exposure to infectious agents. There was also no mention of the use of masks by patients and staff when opening catheters. Surely if there is evidence of nasal staph aureus causing infection, masks should be worn. And is there no longer any reason to dedicate one lumen to TPN?

I was pleased to see the emphasis that was put on the need for an interdisciplinary team approach (lines 94 and 276) as well as the importance of nursing care and adequate nurse:patient ratios. And it was good to see

guidelines for prompt removal of catheters as well as reinforcement of the concept of removing unnecessary catheters (lines 310 and 910, 1402).

I was also interested to see that though there were several references to the thrombogenicity of some catheter materials and the infectious risk that biofilm and thrombus pose, there was no mention of the need for, and use of, thrombolytics. But that is not surprising given that the average length of indwell for these catheters you are writing guidelines for is only 7 days.

Another area that the hemodialysis community needs help with is the cleaning and disinfection of catheter hubs and dialysis line connections at the start and end of dialysis. You did cite the risk of contaminated hubs. We need very specific guidelines on antimicrobial solution/s that are compatible with long-term catheter materials. There was no mention of the use of sodium hypochlorite that is being used around the nation because it can be used with all catheter materials as well as on skin and enjoys a good reputation here and in studies from Europe and Canada.

The recommendation to only change the dressing on a newly placed tunneled catheter every 7 days is also troublesome. A mandatory part of the predialysis assessment is to view the catheter exit site PRIOR to starting dialysis to confirm lack of infection AND no evidence of dislodgement. A transparent dressing would work for this but frequently the patient has gauze for the post placement oozing. I was interested to see that there was no resolution to the question of the need for a dressing in a well-healed exit site. I believe that should be left to nursing judgment for the individual patient.

The affirmation of aseptic technique is appreciated as is the permission to shower with adequate catheter dressing protection.

Some very specific guidelines on the differentiation between CABSIs and CRBSIs would also be helpful. Last but not least is the line 1393 recommendation to "Use a subclavian site, rather than a jugular or a femoral site, in adult patients to minimize infection risk for nontunneled CVC placement" – There are 20-40 million people in the US with chronic kidney disease. Most patients who reach stages 4&5 CKD have 3-4 major comorbidities for which they may have required a non-tunneled CVC. Could you please amend this recommendation to include a caveat for the potential of CKD.

I would be happy to answer any questions you may have. You may contact me at (919) 616-8140 or preferably by email at lesleyd@nc.rr.com